Example for PDFLaTeX

Using GnuPlot in PDFLaTeX
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With PDFLaTeX, one can include PDF graphs directly, using e.g.

```
\usepackage[pdftex]{graphicx}  % For including PDF images
\begin{figure}[!htb]
  \centering
  \resizebox{0.8\textwidth}{!}
    {\includegraphics{graphs/exampdf}}
  \caption{Inclusion of PDF file}
  \label{Gr: Exam3}
\end{figure}
```

as in figure 1. It might however be more convenient to use the EPS output from GnuDraw, and transform those to PDF using an external tool like eps2pdf. On Linux machines, if this tool is installed, a call like

```
  plb2x -epsc -topdf graphs/exameps
```

will produce both a EPS and a PDF file. Also, MiKTeX is able to do the transformation automatically, including the package `epstopdf`. The resulting graph could then be included as

```
\usepackage[pdftex]{graphicx}  % For including PDF images
\usepackage{epstopdf}          % or EPS, transforming to PDF automaticallly
\begin{figure}[!htb]
  \centering
  \resizebox{0.8\textwidth}{!}
    {\includegraphics{graphs/exameps}}
  \caption{Inclusion of EPS file which was transformed afterwards to PDF}
  \label{Gr: Exam4}
\end{figure}
```

Alternatively, PDFLaTeX can also include PNG files, though the output is not always as nice:

```
\usepackage[pdftex]{graphicx}  % For including PDF images
\begin{figure}[!htb]
  \centering
```

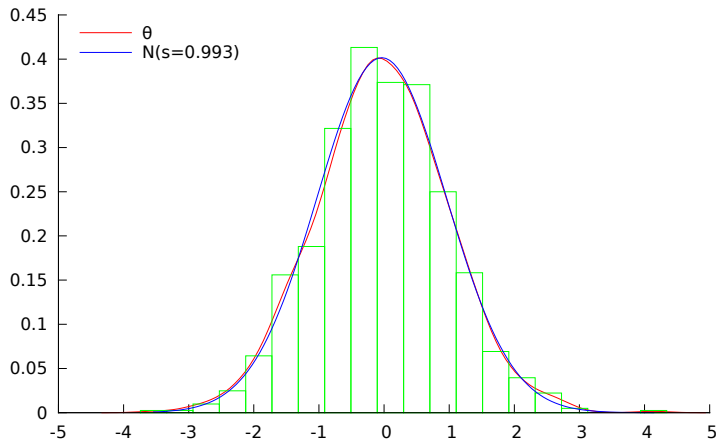

Figure 1: Inclusion of PDF file

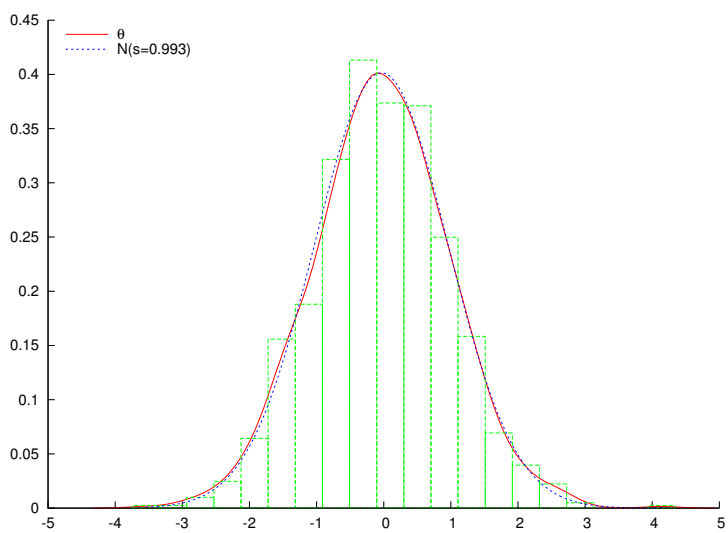

Figure 2: Inclusion of EPS file which was transformed afterwards to PDF

```
  \resizebox{0.8\textwidth}{!}
    {\includegraphics{graphs/exampng.png}}
  \caption{Inclusion of PNG file}
  \label{Gr: Exam5}
\end{figure}
```

Another output option is the `.etex` format. This results in a combination

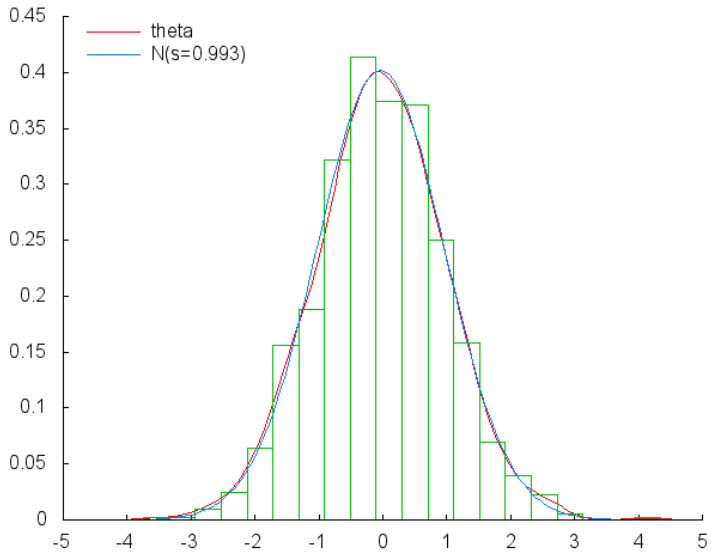

Figure 3: Inclusion of PNG file

of LaTeX and EPS. Both output files (`.tex` and `.eps`) are necessary for inclusion of the plot, using commands like

```
\usepackage{graphicx}
\usepackage{latexsym}  % For Diamond in GnuPlot images...
\begin{figure}[htb]
  \centering
    \input{graphs/exametex.tex}
  \caption{Inclusion of EPS\LaTeX\ graphics file}
  \label{Gr: Exam6}
\end{figure}
```

as in figure 4. Notice that with this EPSLaTeX format there is a small problem with the path of the file. The `graphs/exametex.tex` file in turn tries to include `exametex.eps`. If, as is done here, the graphs are found in a subdirectory, then the `graphs/exametex.tex` will have to be adapted by hand to change the `includegraphics` reference to the `graphs/exametex` file, adding the directory name, or else LaTeX will complain that it cannot find the EPS file. When PDFLaTeX is used, the EPS file is translated again to PDF by the epstopdf package.

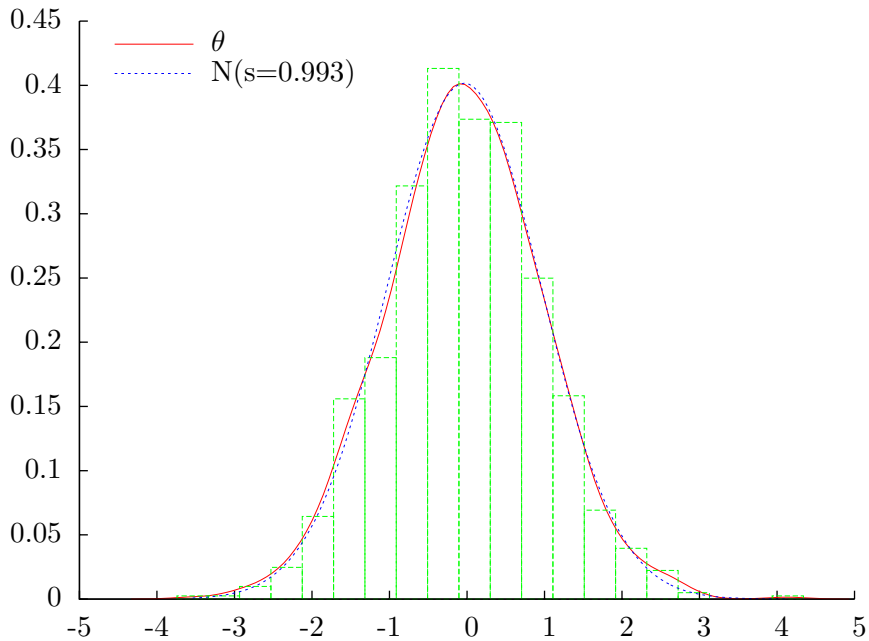

Figure 4: Inclusion of EPSLaTeX graphics file, with translation to PDF